



June 30, 1997



Cal/EPA

Department of
Toxic Substances
Control

Pete Wilson
Governor

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95827-2106

Mr. Robert W. Wood
Remedial Project Manager
AFFTC/EMR
5 East Popson, Building 2650A
Edwards Air Force Base, California 93524-1130

Secretary for
Environmental
Protection

CONCURRENCE WITH THE FINAL ACTION MEMORANDUM FOR THE
SITE 5/15 CONTAMINANT PLUME HOT SPOT REMOVAL, SOUTH BASE,
OPERABLE UNIT NUMBER 2, EDWARDS AIR FORCE BASE, CALIFORNIA,
APRIL 1997

Dear Mr. Wood:

The California Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (RWQCB), Lahontan Region (collectively, the State) have reviewed the Final Action Memorandum for the Site 5/15 Contaminant Plume Hot Spot Removal at South Base, Operable Unit Number 2, Edwards Air Force Base. DTSC finds this document, in conjunction with the Engineering Evaluation/Cost Analysis prepared for this action, to be equivalent with DTSC Remedial Action Plan decision documents. The State finds that these documents address our concerns and we concur with the chosen interim removal action (IRA).

This Action Memorandum summarizes the proposed IRA and serves as the primary decision document for the non-time critical removal at Site 16. The Action Memorandum substantiates the need for the IRA and provides documentation on the decision-making process for inclusion into the administrative record.

Soil and groundwater at Sites 5 and 15 are contaminated with petroleum hydrocarbons and chlorinated solvents. Remedial investigation and risk assessment results showed that the contaminants present in the soil, groundwater, and



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soil gas pose a risk to human health and the environment. The proposed IRA appears consistent with the long term remedy at the site. The implementation of the IRA is a necessary part of protecting public health, welfare, and the environment.

The response action addresses the documented principal public health and environmental threats from Sites 5 and 15. The proposed IRA will address soil and groundwater contamination above the Total Designated Levels and the Maximum Contaminant Levels as follows:

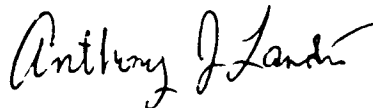
- Chlorinated solvents and petroleum hydrocarbon-contaminated soils will be treated using soil vapor extraction. Vapors will be extracted with a positive displacement blower and treated using a thermal/catalytic oxidizer;
- Groundwater extraction will be achieved by using a dedicated, top-loading pneumatic pump in each dual extraction well;
- Any free product will be separated from the extracted groundwater in an oil-water separator. The product will be recycled or disposed off-site;
- A low-profile air stripping tower will be used to remove the volatile organic compounds (VOCs) from the extracted groundwater. The VOCs in the vapor stream exiting the air stripping tower will be combined with the vapors extracted from the wells and treated using a thermal catalytic oxidizer. Liquid-phase granular activated carbon will be used for final effluent polishing; and
- Treated water will be discharged to the sanitary sewer system.

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The State finds the selected IRA protective of human health, welfare, and the environment, complies with the State requirements that are legally applicable or relevant and appropriate to the removal action, and is cost effective. The IRA uses permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable, and satisfies the Comprehensive Environmental Response, Compensation, and Liability Act, Section 121, preference for corrective actions that reduce toxicity, mobility, or volume, as principal elements. The Record of Decision that addresses Sites 5 and 15 will determine the final remedy, Applicable or Relevant and Appropriate Requirements and cleanup levels.

Should you have any questions, please contact Mr. John O'Kane, Project Manager, at (916) 255-3715, or Ms. Cindi Mitton, of the RWQCB, at (760) 241-7413.

Sincerely,



Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities

cc: Mr. Richard T. Russell, P.E.
Remedial Project Manager
United States Environmental Protection Agency
Region 9
75 Hawthorne Street, (H-9-1)
San Francisco, California 94105-3901

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cc: Ms. Cindi Mitton, P.E.
Remedial Project Manager
California Regional Water Quality Control Board
Lahontan Region
15428 Civic Drive, Suite 100
Victorville, California 92392

Ms. Pamela Birge
AFFTC/EMR
5 East Popson, Building 2650A
Edwards Air Force Base, California 93524-1130

Report of AWP Activity Completion

Date of Report: 6/30/97

Site Name: Edwards Air Force Base / OU-2 South Base

CALSITES Activity: RAP

ALLOC	CERT	DES	FDNC	FRIFS	PEA	RAW	SSEBS
ARB	CONF	DISC	FORUM	OM	PPP	RIFS	STAB
BWEBS	COST	DLIST	FOSL	ORDER	PRP	RMDL	VCOMP
CEQA	DCERT	ENFFU	FOST	PA	RA	SI	VCONS
CERFA	DEED	ERA	FRA	PAPEA	<u>RAP</u>	SS	5 YEAR

Activity Description (up to 5 characters): 5615

example: OU1

DATE OF COMPLETION: 06 / 30 / 1997

Size of Activity: [] Small [] Medium [X] Large [] X-Large

DESCRIPTION OF ACTIVITY:

The State has reviewed the Final Action Memorandum for the Site 5/15 Contaminant Plume Hot Spot Removal at South Base, Operable Unit #2, EAFB. DTSC finds this document, in conjunction with the EE/CA prepared for this action, to be equivalent with DTSC Remedial Action Plan Decision documents. The State finds that these documents address our concerns and we concur with the chosen interim removal action (SVE and groundwater extraction).

VOLUME REMEDIATED (TOTAL):

	Removed	Treated
Cubic Yards of Solids:	_____	_____
Gallons of Liquid:	_____	_____

Did the activity include a CAP? (X or Blank) _____

Did the activity include a Fence? (X or Blank) _____

Did the activity include the decommissioning of a well?
(X or Blank) _____

Groundwater Remediation Extraction Rate (gpm):

Cubic Feet per Minute of Soil Vapor Extraction:

Acres of Land Returned/Released for reuse: _____

Based on:
Cleaned Up
Evaluated & Found No Significant Risk
C - Commercial
I - Industrial
R - Residential
U - Unknown

Required Documentation Provided (Y/N): Yes

Send Backup Documentation on Completed RAPS/RODS/RAWS (including executive summary), Orders/Agreements, CERT/COM/DELIST packages to Headquarters.

PROJECT MANAGER

Don A. O'Keefe

BRANCH CHIEF